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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
YU, HENRY W				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/563,491

**Applicant(s)**

VACHERAND ET AL.

**Examiner**

HENRY YU

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/563,491.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date 01/05/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

The instant application having Application No. 10/563,491 has a total of 10 claims pending in the application; there is 1 independent claim and 9 dependent claims, all of which are ready for examination by the examiner.

**I. INFORMATION CONCERNING PRIORITY**

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on July 10, 2003. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/563,491, filed on January 5, 2006.

**INFORMATION CONCERNING OATH/DECLARATION**

***Oath/Declaration***

2. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

**INFORMATION CONCERNING DRAWINGS**

***Drawings***

3. The drawings are objected to because the reset signal disclosed in Figure 2 is labeled as "Reset" though the specifications indicate that the reset signal is labeled as "RAZ" (similar in nature to the reduced addressing code being labeled as "C" and the increment signal being labeled as "SI"). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

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corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**OBJECTIONS TO THE SPECIFICATION**

***Specification***

4. The applicant's specification submitted is acceptable for examination purposes.

***Claim Objections***

5. **Claims 18, 21, and 23** are objected to because of the following informalities:

On line 9 of **Claim 18**, the words "plurality of" should be inserted before the word "microsystems" since the limitation microsystem, when noted in the plural form earlier in the claim, is accompanied by the words "plurality of." The same wording problem also applies to line 1 of **claim 21** and line 1 of **claim 23**.

Appropriate correction is required.

**REJECTIONS NOT BASED ON PRIOR ART**

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 18-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 discloses the limitation "*the microsystem*" on line 12. However, it is unclear which particular microsystem is referred to as previous references to microsystem refer to "a plurality of microsystems" or to "*each microsystem*" in a general sense (e.g. to indicate that each and every microsystem contains a particular component). Examiner suggests that Applicant replace the word "*the*" that is before microsystem with the word *-each-*. The same problem also applies to line 2 of claim 20. Claims 19-27 are also rejected as they inherit the deficiency that is present in claim 18.

Claim 21 discloses the limitations "*the line and column counters*" on line 5. There is insufficient antecedent basis for this limitation in the claim, as the line and column counters are not disclosed previously in the claim or any parent claim. Examiner suggests Applicant remove the word "*the*" that is before "*line and column counters.*" Furthermore, claim 22 is also

rejected as claim 22 inherits the deficiency pertaining to the line and column counters that is present in claim 21.

Claim 25 discloses the limitation "*the latter*" on line 2. However, it is unclear what "*the latter*" refers to, as it could pertain to a microsystem or the control circuit. For the purpose of examination, the Examiner assumes "*the latter*" refers to a microsystem.

Claim 26 discloses the limitation "*the type of command to be executed by the microsystems.*" It is unclear whether the "*type of command to be executed by the microsystems*" refers to "*a pre-determined command*" as disclosed on line 8 of claim 18. Examiner suggests Applicant replace the word "*the*" that is before "*type of command*" with the word -a-. The same problem also applies to line 2 of claim 27.

#### REJECTIONS BASED ON PRIOR ART

##### *Claim Rejections - 35 USC § 102*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. **Claims 18-22 and 25-27** are rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al. (Patent Number US 3,737,858).

As per **claim 18**, Turner et al. discloses "method of addressing a plurality of microsystems (**multiple remote transponders**) which can be individually addressed by a control circuit (**telemetry system includes a central station**), the control circuit and each microsystem comprising electromagnetic transmission means (**though Turner et al. prefers the use of coaxial cables, the transmission medium may also include radio links; Column 4, lines 36-46**), each microsystem comprising a counter and having an addressing code (**each transponder, with its corresponding transducer, is assigned a number pertaining to channel and letter designation. An example used is IA (channel I, letter A); Column 5, lines 51-55**), an addressing phase of the microsystems comprising transmission, by the control circuit, of successive increment signals (**the control logic circuit 13 counts interrogate pulses; Column 5, lines 24-25**), each microsystem monitoring resetting of its counter and, upon receipt of an increment signal, incrementation of the content of its counter (**each transponder includes a counter for counting interrogate pulses (Column 5, lines 47-48), with the counter being recycled at the completion of each interrogate cycle;**



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Column 6, lines 24-26), and each microsystem comparing the content of its counter and its addressing code, so as to trigger execution of a pre-determined command when the content of its counter and its addressing code are identical (each transponder also contains a decoding circuit (emphasis) which initiates generation of a reply pulse when the interrogate pulse count is equal to a number assigned to one of its transducers; Column 5, lines 46-55), method wherein, the microsystems forming an array of microsystems, each microsystem comprises an identification code, in a read-only memory (each transponder has a decoding circuit (emphasis), which responds only when the interrogate pulse count is equal to a number assigned to one of its transducers (Column 5, lines 46-55), indicating that the transponder and corresponding transducer store the expected number of pulses in order to make a proper comparison. The system also discloses the use of memory to store transducer states (Column 6, lines 16-19), which can easily be utilized within transponders and corresponding transducers), and the method comprises an initialization phase successively comprising, for each microsystem, addressing, by the control circuit, of the microsystem by its identification code and storing of a reduced addressing code supplied by the control circuit in a register of the microsystem (each transponder

*includes a counter for counting interrogate pulses and a decoding circuit (emphasis) which initiates generation of a reply pulse when the interrogate pulse count is equal to a number assigned to one of its transducers; Column 5, lines 46-55)."*

As per claim 19, Turner et al. discloses "the reduced addressing code of a microsystem is a function of its position in the array (the transponders are arranged in channels, with the transponders in each channel designated by the channel designation (this passage indicates different channel ID values) followed by a letter designation; Column 5, lines 38-42)."

As per claim 20, Turner et al. discloses "the reduced addressing codes of the microsystems correspond to increasing numbers starting from a first microsystem (the channel designations are sequential from I, II - M. The same sequential increase also applies to the letter designation, which goes from A, B - m; Column 5, lines 38-42)."

As per claim 21, Turner et al. discloses "the microsystems are arranged in lines (channels with designations I, II - M) and columns (letter designations with A, B - m; Column 5, lines 38-42), the reduced addressing code of each microsystem comprising a line number and a column number respectively stored in line and column registers of the microsystem (each transponder, with

*its corresponding transducer, is assigned a number pertaining to channel and letter designation. An example used is IA (channel I, letter A); Column 5, lines 51-55), the contents of the line and column registers being respectively compared with the contents of the line and column counters of the microsystem (each transponder includes a counter for counting interrogate pulses and a decoding circuit (emphasis) which initiates generation of a reply pulse when the interrogate pulse count is equal to a number assigned to one of its transducers; Column 5, lines 46-55)."*

As per claim 22, Turner et al. discloses "the control circuit successively transmits line increment signals and column increment signals (the control logic circuit 13 counts interrogate pulses; Column 5, lines 24-25), the line increment signals causing the content of the line counters to be incremented and the column increment signals causing the content of the column counters to be incremented (it should be noted the channel designations are sequential from I, II - M. The same sequential increase also applies to the letter designation, which goes from A, B - m; Column 5, lines 38-42) and the line counters of all the microsystems to be reset (the interrogate pulse counters in control logic circuit 13 and in the

**transponders are recycled at the completion of each interrogate cycle; Column 6, lines 23-26).**"

As per **claim 25**, Turner et al. discloses "a microsystem transmits an acquit signal after the latter has executed its command **(after receiving the interrogate pulses from the transmitter/receiver 12, the transponder sends back a replay frequency (Column 10, lines 20-21) to the central station indicating a particular state value; Column 6, lines 35-43).**"

As per **claim 26**, Turner et al. discloses "the control circuit **(the control logic circuit 13)** transmits data representative of the type of command to be executed by the microsystems in association with transmission of a reset signal **(after each interrogate cycle, the counters of the control logic circuit 13 and transponders are recycled (reset) (Column 6, lines 23-26), which indicates that another interrogate cycle is to be done).**"

As per **claim 27**, Turner et al. discloses "the control circuit **(the control logic circuit 13)** transmits data representative of the type of command to be executed by the microsystems in association with transmission of an increment signal **(the control logic counts interrogate pulses (Column 5, lines 24-25) directed at a particular transponder with its corresponding transducer, which causes the particular**

***transponder with its corresponding transducer to send a reply pulse back to central station; Column 6, lines 10-16).***"

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Turner et al. (Patent Number US 3,737,858) in view of Comiskey et al. (Publication No. US 2002/0063661 A1).

As per **claim 23**, Turner et al. discloses "the method" (see rejection to **claim 18** above). Though Turner et al. discloses "the microsystems are arranged in lines (***channels with designations I, II - M***), in columns (***letter designations with A, B - m***; Column 5, lines 38-42)" as well as "stored in an additional register (***each transponder, with its corresponding transducer, is assigned a number pertaining to channel and letter designation. An example used is IA (channel I, letter A)***; Column 5, lines 51-55)...each microsystem comprising an additional

counter...the content of the register...being compared with the content of the counter associated to the height (**each transponder includes a counter for counting interrogate pulses and a decoding circuit (emphasis) which initiates generation of a reply pulse when the interrogate pulse count is equal to a number assigned to one of its transducers; Column 5, lines 46-55),**" Turner et al. does not disclose methods and components relating to height, which Comiskey et al. discloses [**x, y, and z (with z being analogous to height) pixels are present, resulting in a three-dimensional addressing scheme (Page 3, paragraph 0049)]**].

Turner et al. and Comiskey et al. are analogous art in that they both focus on addressing, especially as they pertain to the position (e.g. row, column, and height) of a unit.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the method as disclosed by Turner et al. to also include coordinates and supporting components for height as disclosed by Comiskey et al.

The motivation for doing so is substituting a three-dimensional addressing scheme for a two-dimensional one can help reduce the number of drivers needed to run each pixel [**Page 3, paragraph 0049**], with the problem concerning the sheer number of drivers required being disclosed on [**Page 2, paragraph 0011**].

Since Comiskey et al. calls the addressing system "*three-dimensional addressing*," it would immediately be obvious to one skilled in the art that such a system can also apply to addressing units/pixels in three dimensions.

As per **claim 24**, the combination of Turner et al. and Comiskey et al. discloses "*the method*" (see rejection to **claim 23** above). Comiskey et al. further discloses the idea where the height value is affected while the line and column values are reset in "*the control circuit transmits height increment signals causing the additional counters associated to the height to be incremented and the line and column counters of all the microsystems to be reset (the system has the plurality of pixels arranged in sub-arrays containing the first and second sets of addressing means, with the sub-arrays being denoted by the third set of addressing means. Depending on the value of the third set of addressing means, the first and second sets of addressing means are not utilized or ignored; Page 3-4, paragraph 0050).*"

#### **ACKNOWLEDGEMENT OF REFERENCES CITED BY APPLICANT**

12. As required by **M.P.E.P. 609(c)**, the applicant's submission of the Information Disclosure Statement dated January 5, 2006, is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As

required by **M.P.E.P 609 C(2)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

**RELEVANT ART CITED BY THE EXAMINER**

13. The following prior art made of record and relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

14. The following references teach addressing, especially as they pertain to the position (row, column, height) of a unit:

**U.S. PATENT NUMBERS:**

2006/0166681 A1

2003/0122079 A1

**CLOSING COMMENTS**

*Conclusion*

**a. STATUS OF CLAIMS IN THE APPLICATION**

15. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P 707.07(i)**:

**a(1). CLAIMS REJECTED IN THE APPLICATION**



16. Per the instant office action, claims 18-27 have received a first action on the merits and are subject of a first action non-final.

17. The examiner requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

18. When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY YU whose telephone number is (571)272-9779. The examiner can normally be reached on Monday to Friday, 8:00 AM to 5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Tsai can be reached on (571) 272-4176. The fax phone number for the

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organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. Y./  
Examiner, Art Unit 2182

**/Henry W.H. Tsai/  
Supervisory Patent Examiner, Art Unit 2184**